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MJ

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/957,045 10/24/97 DALUGE

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023347 HM12/0523
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EXAMINER

BERCH, M

ART UNIT	PAPER NUMBER
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1624

DATE MAILED:

05/23/01

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Best Available Copy

Advisory Action

Application No.

08/957,045

Applicant(s)

DALUGE ET AL.

Examiner

Mark L. Berch

Art Unit

1624

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 May 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check only a) or b)]

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
- b) ☐ In view of the early submission of the proposed reply (within two months as set forth in MPEP § 706.07 (f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.
3. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search. (see NOTE below);
- (b) ☐ they raise the issue of new matter. (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

4. ☒ Applicant's reply has overcome the following rejection(s): One art rejection and one 112 issue. See memo.
5. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
6. ☒ The a) ☒ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See memo.
7. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
8. ☐ For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):
- Claim(s) allowed: _____
- Claim(s) objected to: _____
- Claim(s) rejected: 9 and 18-22.
- Claim(s) withdrawn from consideration: _____
9. ☐ The proposed drawing correction filed on _____ a) ☐ has b) ☐ has not been approved by the Examiner.
10. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
11. ☒ Other: PTO-892

Mark L. Berch
Primary Examiner
Art Unit: 1624

DETAILED ACTION

The traverse on glycosidic bond is unpersuasive. Applicants have presented a new diagram which at least depicts a purine, but the original questions remain unanswered, and the remarks made about this have in fact made matters worse. Applicants have also not stated whether this is exactly what a glycosidic bond comprises, or whether this is just an example. That is, is the excluded R^3 only the one with this specific choice --- the ribose ---, or is this merely one example of a compound with a glycosidic bond. Would the term cover disaccharides, etc.? Please note that the term is used in claim 22, which doesn't permit R^3 to be cyclic in the first place, so apparently applicants intend something broader even than rings. But what?

Applicants argue that the term is widely used. That per se does not make it definite. A term like "rapidly" can be commonly used but have no single generally accepted meaning.

Applicants state that the bond is one between the glycoside and the aglycone. Leaving aside the fact that the chloro-purine is not in fact an aglycone piece (because chloropurines are not nucleosides), the examiner noted previously that, while glycoside is a commonly used term, it has no generally accepted definition. Would it still be a glycoside if one, two or three OH groups were missing, or if an additional OH or hydroxymethyl group were present, or if the two OH groups attached to the ring were attached to the same carbon instead of adjacent carbons? If the ring size were 4, 6, 7 or 10 instead of 5? If the ring had 1 sulfur, nitrogen or carbon instead of one oxygen, or if it had 2 oxygens instead of just one? If the ring were unsaturated, bridged or fused to

another ring? If the ring had other substituents such as amino, halo, acetoxy or a heterocycle? Are acyclic versions included in the definition of the aglycone? Applicants have not answered any of these questions. Instead, applicants refer to the fact that their particular aglycone is an aminor. While this is true, the claims do not exclude aminors generally. For example, if R^3 were an epoxy group, it would still be an aminor, but would quite possibly not be intended to be included in the term glycoside. Thus, if the intent is, as expressed in the remarks, to exclude aminors, this language does not do that.

Applicants state that they are entitled to be their "own lexicographer" Agreed, but applicants have not as yet defined the term, and while they refer to the specification, the term has no definition there either.

The issue on "acyclic group" remains, as the amendment only eliminated one of the lists. The wording is inconsistent. An acyclic group simply is a group with no cycles; it already permits substituents. Thus, it is unclear what the purpose of the remaining list is.

An impasse has been reached on the question of "phosphonyl". Applicants are simply confused. On page 8 is a drawing with names. The middle item, H_3PO_4 is called "Phosphonic acid". That is simply wrong. H_3PO_4 is phosphoric acid. The Hack's Dictionary reference is provided (page 445). The item to the left is the dihydrogen phosphato group; to the right is the phosphono group. All three are thus misnamed in the response.

IUPAC rules states, "phosphonic acids: * $HP(=O)(OH)_2$ (phosphonic acid) and its P-hydrocarbyl derivatives. NOC Rule D-5.51." Therefore, e.g. $PhP(=O)(OH)_2$ would be

Phenylphosphonic acid (the hydrocarbon is phenyl). The Hackh's Dictionary reference is provided (page 444). Hence, Phosphonyl would be the acyl of this, formed by removal of the OH to give $RP(O)(OH)-$, with R not defined, as was stated in the Final Rejection.

Issue 4 is resolved.

The "carbocyclic group" issue remains. The response simply doesn't address the issue raised. It is understood that the substituents are on the "carbocyclic group" but that wasn't the question at all. The issues had to do with what is included in "carbocyclic group". For example, is a group like benzyl which has a carbocycle present, but which is not entirely carbocyclic included or not included? Again, "carbocycle" is suggested.

The traverse of the Daluge '697 in view of Vince '224 or Daluge '671, further in view of Norbeck, Vince '607, Borthwick or Shealy rejection is unpersuasive. The declaration gives conclusions without the actual experiments to back them up. Some of the discussion appears to have nothing to do with the claims. For example, applicants state that "Compounds of formula (III) are more reactive to amines; thus a shorter reaction time is needed." Shorter than what? And please note, that while the attachment shows "Present Inventive Process" as (III) reacting with amine to give VI, that step is not part of the claims. Further, while the Attachment shows Example 27 of the reference as being the cyclization plus amination, these are actually separate steps. That is, the cyclization goes first to give the 6-Cl compound, which was not actually isolated. Thus, difficulties in isolating the product of the next step, the conversion of 6-Cl to 6-cyclopropylamino are irrelevant. The examiner does not rely on that step

(conversion of 6-Cl to 6-cyclopropylamino) because the claims do not have such a step either. Applicants argue difficulties in removing the protecting group, but again, no evidence of this is actually presented. Similarly, applicants state, "chlorination ... without blocking the amino ... results in tars." Again, chlorination is simply not part of the claimed process at all --- this is a step much much further back.

The EP 413,544 in view of Norbeck, Vince, Borthwick or Shealy rejection is taken care of by the amendment.

The traverse of the rejection over Norbeck, Vince, Borthwick or Shealy, in view of EP 413,544 or Daluge '697 is unpersuasive. It appears that an impasse has been reached. Applicants refer to the declaration, but the declaration does not make any reference at all to any of the primary references in this rejection. Applicants also argue lack of motivation to combine, but this is unpersuasive; the references are all involved in the same overall goal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark L. Berch whose telephone number is 703-308-4718. The examiner can normally be reached on M-F 7:15 - 3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached on 308-4716. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 708-308-1235.



Mark L. Berch
Primary Examiner
Art Unit 1624

May 17, 2001